

Beyond Commensuration: Plural Valuation of Nature in Official Statistics and Ecosystem Accounting

Erik Gomez-Baggethun¹

Abstract

Ecosystems hold multiple and incommensurable values, including social, ecological and economic values. These values are expressed through ecological functions, material contributions to human well-being, and cultural meanings. Integrating the diverse values of nature into official statistics remains a central challenge for ecosystem accounting and environmental decision-making. Conventional accounting frameworks have historically privileged monetary representations of ecosystem contributions, relying on market-based and simulated prices to aggregate environmental information into a single metric. While this approach facilitates integration with national accounts, it narrows the representation of nature's importance by underrepresenting values that cannot be meaningfully expressed in monetary terms. The IPBES Values Assessment highlights that global biodiversity loss is closely linked to the systematic marginalization of non-market values in decision-making and calls for more inclusive and pluralistic valuation approaches that reflect the diversity of ways in which people attribute meaning and importance to nature. Plural or integrated valuation frameworks respond to this challenge by combining monetary valuation with biophysical indicators, and qualitative information that can be coded into categorical variables to facilitate their integration into statistical system. Rather than seeking full commensuration, such frameworks acknowledge value pluralism. In official statistics, this implies moving beyond single-aggregate indicators toward hybrid accounting systems that integrate multiple types of information while preserving their distinct epistemological foundations. Such an approach can enhance the relevance, legitimacy, and policy usefulness of ecosystem accounts by making visible otherwise excluded values and by supporting more transparent trade-off deliberation in environmental governance.

Keywords

Incommensurability, value pluralism, integrated valuation

¹ Norwegian University of Life Sciences (NMBU) and Norwegian Institute for Nature Research (NINA)